time and obesity. However, the deep sternal wound infection was exactly the same; 0.7% (14/1, 809) for one IMA vs 0.7% (5/658) for two IMA's. In the highest risk subgroup, i.e., diabetes, the overall wound infection rate was 2.4% (3/121) but this again does not differ from diabetics with a single IMA whose sternal wound infection rate was 1.4% (7/486) ($p = 0.48$).

Conclusion: The use of bilateral internal mammary arteries using these dual techniques in pts has a very low overall sternal wound infection 0.7% (5/568). Importantly, it is exactly the same as single IMA's. In diabetic mellitus pts it is modestly elevated to 2.4% (3/121) but is not statistically different from single IMA's with diabetes. Avoiding electro cautery and bone wax resolves the issue of BIMA vs IMA in most instances with regard to deep sternal infection and results in a minimal deep sternal wound infection rate with or without diabetes.

1064-168 Distinctive Hemodynamic Features of the Freestyle Aortic Bioprosthesis as Compared to Stented Bioprosthesis

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The objective of this study was to evaluate the short, medium and long term hemodynamic performance of the Freestyle unstented prosthesis as compared to conventional stented prosthesis. The study includes 157 patients (pts) (69 M, 88 F) aged 48 to 85 years (mean 69 ± 7) operated for aortic insufficiency (11 pts), stenosis (58 pts) or mixed disease (88 pts) and prosthesis size (mm, n pts) were 19 (4), 21 (22), 23 (42), 25 (52), 27 (37). Echocardiograms were done early (157 pts), 3–6 months (129 pts), 11–14 months (99 pts) and 23–25 months (21 pts) after operation. Distinctive hemodynamic features of the prosthesis compared to stented prosthesis are: 1. Hemodynamics improve significantly during the first 3–6 months (mean gradient −3.5 ± 4.0 mmHg ($p < 0.001$), effective orifice area (EOA) + 0.15 ± 0.26 cm^2 ($p < 0.05$)) and remain stable thereafter. 2. Average mean gradient (6 + 4 mmHg) at one year is markedly lower than in similar size stented prosthesis (e.g. Intact prosthesis = 22 ± 8 mmHg, Mosaïc prosthesis = 12 ± 6 mmHg). 3. In vivo EOA's are lower (−0.91 ± 0.35 cm^2) than EOA's calculated in vitro. As in stented prosthesis, there is a close correlation ($r = 0.77$) between EOA indexed for body surface area and mean gradient but with less evidence of patient-prosthesis mismatch. Incidence of trivial or mild aortic regurgitation was similar (e.g. 34% vs 29% in Intact prosthesis).

We conclude that the Freestyle prosthesis has better hemodynamics than stented bioprosthesis but that distinctive features need to be taken into account when interpreting echocardiographic results.

1064-169 Ventricular Reduction Surgery as a Treatment for Idiopathic Dilated Cardiomyopathy

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We report our single center experience with ventricular reduction surgery for the treatment of non-ischemic dilated cardiomyopathy in 7 patients, all of whom were ineligible for cardiac transplant. All were symptomatic NYHA functional class III or IV on background therapy consisting of ACE inhibitor, digoxin, and diuretics. The mean age was 66. Six patients had concomitant mitral and/or tricuspid valve repair. One patient had mitral valve replacement.

At average 26 days follow-up, there have been no deaths. Compared to preop, the postoperative mean parameters are as follows: NYHA functional class improved from 3.9 to 2.7 ($p = 0.015$). Echocardiographic derived LVEF using Simpson's rule improved from 21% to 34% ($p = 0.015$). LVEDD decreased from 69 mm to 58 mm ($p = 0.006$). LVEDV decreased from 217 cc to 117 cc ($p = 0.0003$). LVESV decreased from 169 cc to 77 cc ($p = 0.00005$). Peak aortic outflow velocity increased from 0.69 to 0.79 ($p = 0.10$). Mitral inflow deceleration time increased from 141 ms to 171 ms ($p = 0.08$). Mitral regurgitation improved from +2.7 to +1.6 ($p = 0.08$). Six month follow-up data including SF36 health survey results will also be presented.

In summary, ventricular reduction surgery appears to provide subjective and objective improvement in the early post-operative period in this small number of patients with nonischemic cardiomyopathy. Larger studies and longer follow-up is warranted.

1064-170 Comparison of Three Coronary Bypass Mortality Prediction Models: Results from the National Cardiovascular Network

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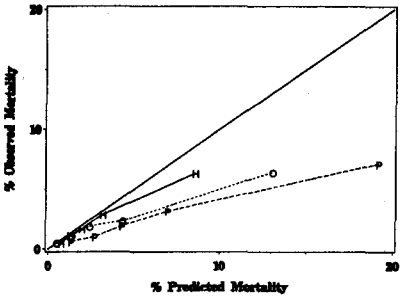
Assessment of risk-adjusted coronary artery bypass surgery (CABG) mortality results is an important means of monitoring quality of care. The National Cardiovascular Network is a volunteer organization (23 high-volume centers) dedicated to sharing clinical outcomes data. Using the NCN clinical database (n = 34,521), we compared the predictive accuracy of three published CABG risk-prediction methods: Parsonnet (P), O'Connor (O) and Hannan (H). The overall NCN in-hospital CABG mortality rate was 3.1% (2.6% in isolated CABG). Median age was 67 years, 29.2% were female, 9.4% had prior CABG, and 43% had prior MI. *Results:* The discriminatory abilities of each method for predicting in-hospital mortality were quite similar (area under ROC curves 0.73–0.74). Below, we display observed versus expected mortality by these three methods:



Conclusions: Existing CABG risk-prediction models tended to over-predict mortality in NCN data, particularly in high risk patients. Validation of risk-prediction models should be a required step in comparisons of outcomes data.

1064-171 Port-access Two-vessel Coronary Revascularization in the Dog

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Single-vessel coronary revascularization using port-access technology and cardiopulmonary bypass (CPB) has been achieved. Using this approach, we evaluated two-vessel coronary revascularization with a "T-graft" of an arterial conduit (superficial femoral artery [SFA]) placed end-to-side to left internal thoracic artery (LITA) in 5 dogs (24 ± 3 kg, mean ± SD). Under general anesthesia and single lung ventilation, LITA was harvested thoracoscopically. A limited anterior mediastinotomy (5 cm) was made. After heparinization, a 4–6 cm segment of SFA was anastomosed end-to side to LITA. Endovascular CPB system was placed peripherally and CPB instituted. Endoaortic clamp, inserted via the femoral artery, permitted ascending aortic occlusion and infusion of antegrade cardioplegia achieving cardioplegic arrest. The SFA-obtuse marginal artery anastomosis and LITA-LAD anastomosis were performed. The animals were weaned from CPB.

Results: All grafts were patent post-mortem. CPB time: 69 ± 13 min; aortic clamp time: 48 ± 9 min.

	Pre CPB	*Post CPB*
Cardiac output (L/min):	2.8 ± 0.7	2.7 ± 0.5
Wedge pressure (mmHg):	9 ± 1	8 ± 1

Conclusions: Using port-access technology, rotation of the heart is possible and two-vessel coronary revascularization with a "T-graft" can be performed safely in the dog. Multiple vessel coronary artery bypass grafting is a possible extension of this approach (using arterial conduits and sequential grafting).

1064-172 Previous Coronary Artery Surgery Has Little Influence on In-Hospital Outcome in Unstable Angina

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To determine whether previous coronary artery surgery (CAS) independently influenced in-hospital outcome after a new episode of unstable angina (UA),